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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/843,838 | 04/30/2001 | Hideyuki Ijiri | 50212-227 | 1916 |
| 7590 03/09/2004 | | | EXAMINER | |
| McDERMOTT, WII & EMERY | | | HOFFMANN, JOHN M | |
| 600 13th Street, N.W. Washington, DC 20005-3096 | | | ART UNIT | PAPER NUMBER |
| washington, 2 | 20003 3070 | | 1731 | |

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | |
|--|--|--|--|----------------------|--|--|--|--|
| Office Action Summary | | 09/843,838 | IJIRI ET AL. | | | | | |
| | | Examiner | Art Unit | | | | | |
| | | John Hoffmann | 1731 | | | | | |
| | The MAILING DATE of this communication | appears on the cover she | et with the correspondence ad | ldress | | | | |
| Period fo | | | 2 MONTH(S) EDOM | | | | | |
| THE - Exte after - If the - If NO - Failu | ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, and period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by since the period by the Office later than three months after the need patent term adjustment. See 37 CFR 1.704(b). | N. R 1.136(a). In no event, however, not. a reply within the statutory minimumeriod will apply and will expire SIX (6) tatute, cause the application to become | nay a reply be timely filed of thirty (30) days will be considered timel) MONTHS from the mailing date of this come ABANDONED (35 U.S.C. § 133). | ly. ommunication. | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 1 | 19 <u>February 2004</u> . | | | | | | |
| <i>-</i> | This action is FINAL . 2b) This action is non-final. | | | | | | | |
| • | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| · | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | ion of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>4,5 and 8-17</u> is/are pending in the application. | | | | | | | | |
| - / | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | | | |
| · | Claim(s) <u>4,5, 8-17</u> is/are rejected. | | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| 8) | Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicat | ion Papers | | | | | | | |
| 9) | The specification is objected to by the Exar | miner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | | |
| • | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority | under 35 U.S.C. § 119 | | | | | | | |
| 12) | Acknowledgment is made of a claim for for □ All b)□ Some * c)□ None of: | eign priority under 35 U.S | S.C. § 119(a)-(d) or (f). | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| | application from the International Bu | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attachme | | , | | | | | | |
| | ce of References Cited (PTO-892) | ´ - | rview Summary (PTO-413) er No(s)/Mail Date | | | | | |
| 3) 🔲 Info | ce of Draftsperson's Patent Drawing Review (PTO-948 rmation Disclosure Statement(s) (PTO-1449 or PTO/S er No(s)/Mail Date | B/08) 5) Noti | ce of Informal Patent Application (PT er: | O-152) | | | | |

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DETAILED ACTION

Priority

Applicant is hereby required to submit sufficient evidence to prove the international application was copending with the U.S. National application claim benefit under 35 USC 120. The authority for Examiner to require such (and an explanation as to how applicant can meet this requirement) is contained in MPEP 1895. >The evidence submitted to prove that the international application was copending with the U.S. national (35 U.S.C. 111(a)) application should include a certification from applicant that neither the international application nor the designation of the United States was withdrawn or considered to be withdrawn prior to the filing date of the U.S. national (35 U.S.C. 111(a)) application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 appears to have a group that has characteristics of Markush groups, but are not of any of MPEP-recognized forms for proper groupings. Examiner can only

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guess as to what was intended. Examiner does not know if the it requires "an electric heater and a flame".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-5, 8-9, 11, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo JP 62-167235.

Relying on the PTO's English translation of Hiroo:

Claim 16: The implementation method which starts on the middle of page 11 of the translation discloses all of the steps, except for "1/2 or less" limitation and the "1.0 to 2.5 mm" limitation. The 4.5-6.5 limitation: Hiroo insert a 3.5 mm rod into a 20 mm tube: this yields about 5.7.

Hiroo's elongation ratio is slightly more than the ½ value. And only 0.75mm is etched, not 1-2.5mm. It would have been obvious to stretch and etch as much as desired/needed to get the results that one desires depending upon what starting materials one has available, and what sizes are needed/desired during further processing - with no new or unexpected results.

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Claim 4: page 13, line 4 indicates that all the OH-containing material is removed.

Alternatively, it would have been obvious to have as low an OH concentration as possible because it is a detrimental contaminant.

Claim 5: The bottom of page 14 of the translation indicates that the OH causes loss. It would have been obvious to have as low an OH concentration as possible so as to lessen the loss - with no new or unexpected result.

Claim 8: Hiroo's outer diameter is about 11.5. It would have been obvious to have what ever sizes one desires, depending upon the specific optical properties one wants to have, and any further processing that is to occur. '

Claim 9: it would have been obvious to stretch the preform as desired with no new or unexpected results depending upon what the optimal preform size is for the fiber-drawing furnace. Alternatively, it would have been obvious to draw the preform into a fiber, because that is the intended purpose of the Hiroo method. And it would have been further obvious to make a fiber of a specific size, because if it was random size, it may not adequately work.

Claim 11 appears to be met because Hiroo uses a hydrogen and oxygen torch.

Claim 17 is clearly met.

Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo JP 62-167235 in view of Berkey 5894537.

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Hiroo discloses the invention as discussed above. Hiroo does not disclose depositing a soot body as recited in claim 10. Berkey discloses depositing soot so as to insure/create a uniform substantially cylindrical outer surface; see col. 3, lines 50-32 and/or col. 12, 19-24. It would have been obvious to deposit soot on the out side of Hiroo so as to create or insure a cylindrical outer surface, and/or to increase the size of the preform.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroo (or the Hiroo abstract) as applied to claim 1 and further in view of Kyoto 5221309.

HIroo does not disclose the dopants. From col. 1, line 55 to col. 2, line 31, Kyoto discloses the advantage of using a pure silica core with a fluorine-doped clad: to reduce Rayleigh scattering. It would have been obvious to use fluorine doped claddings in the Hiroo invention for the advantage of Kyoto.

Claim 14: it is deemed that claim 14 is a open-ended group: the "and" signifies that applicant did not intend the two items to be alternates. Therefore the group is open to other elements - including fluorine -doped silica.

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. Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the priority issue, although documents were submitted, the proper certification was not found. See the above requirement which specifies the required certification.

It is also argued that The various dimensional limitations are not taught by Hiroo. The rejection is clearly not based on anticipation. The Office never argued that the dimensional limitations are taught by Hiroo, however such dimensions would have been obvious. Since Applicant has not indicated that such would not have been obvious or otherwise pointed out an error in the obviousness rejection under 35 USC 103, it is deemed that Applicant agrees with the obviousness conclusions made by the PTO.

AS to the argument that Hiroo and Applicant's etching would yield different thicknesses: page 9,lines 15-20 indicates that Hiroo's and Applicant's Etching are the same: to get rid of the OH-containing layer.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner Art Unit 1731

Jmh